SUBMIT IN TRIPLECATE*

Form approved. Budget Bureau No. 42-R1425.

(Other instructions on reverse side)

 $\frac{30-039-21478}{5$. Lease designation and serial no.

| UNITE | ED | STATI | ES |
|-------------------|----|-------|----------|
| DEPARTMENT | OF | THE | INTERIOR |

| APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK a. TYPE OF WORK DRILL DEEPEN DEEPEN PLUG BACK DILL SINGLE ZONE MULTIPLE ZONE AMOGO PRODUCTION COMPANY | | |
|---|---|--|
| DRILL DEEPEN PLUG BACK O. TYPE OF WELL THE GAN WELL DAY OTHER SINGLE MULTIPLE NAME OF OPERATOR AMOCO PRODUCTION COMPANY | 7. UNIT AGREEMENT NAME | |
| THE GAS WELL WELL WE OTHER SINGLE ZONE ZONE AMOCO PRODUCTION COMPANY | Valencia Canyon Unit | |
| NAME OF OPERATOR ARIOCO PRODUCTION COMPANY | S. FARM OR LEASE NAME | |
| | | |
| | 9. WELL NO. | |
| ADDRESS OF OPERATOR | 7 | |
| 501 AIRPORT DRIVE, FARMINGTON, NEW MEXICO 87401 | 10. FIELD AND POOL, OR WILDCAT | |
| LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) | Choza Mesa Pictured Cli | |
| 1700' FNL & 790 FNL, Section 36, T-28-R, R-4-H | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA | |
| At proposed prod. zone | SW /4 NW /4 Section 36. | |
| Same | T-28-N, R-4-0 | |
| DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE. | 12. COUNTY OR PARISH 13. STATE | |
| 11 miles SE of Governador | Rio Arriba New Mexic | |
| LOCATION TO NEAREST | NO. OF ACRES ASSIGNED TO THIS WELL | |
| PROPERTY OR LEASE LINE, FT. (Also to nearest drig, unit line, if any) 790 320 | 164 | |
| DISTANCE FROM PROPOSED LOCATION* 19. PROPOSED DEPTH 20. TO NEAREST WELL, DRILLING, COMPLETED, | 2(. ROTARY OR CABLE TOOLS | |
| OR APPLIED FOR, ON THIS LEASE, FT. 1870 4425' | Rotary | |
| ELEVATIONS (Show whether DF, RT, GR, etc.) | 22. APPROX. DATE WORK WILL START* | |
| 7327' GL est. | As soon as permitted | |
| PROPOSED CASING AND CEMENTING PROGRAM | ť | |
| SIZE OF HOLE SIZE OF CASING WEIGHT PER FOOT SETTING DEPTH | QUANTITY OF CEMENT | |
| 12-1/4" 8-5/8" 24# 300" | 225 sx | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 1040 ax | |
| The above well is being drilled to further develop the Choz | a Mega Pictured | |
| The above well is being drilled to further develop the Choz Cliffs Field. The well will be drilled with a low solids a system. Completion design will be based on open hole logs. is not dedicated. Attached is a Development Plan required | on-dispersed mud This acreage | |
| Cliffs Piels. The well will be drilled with a low solids of system. Completion design will be based on open hole logs. is not dedicated. Attached is a Development Plan required Above Space describe Proposed Program: If proposal is to deepen or plug back, give that on pressite of the proposal is to drill or deepen directionally, give pertinent data on substrace locations and necessary program, if any. Signed Title Area Engineer (This space or Federal or State office use) | This acreage by STL-6. Productive zone and proposed new productive asured and true vertical depths. Give blowout | |

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate acts to be either

a Polega or a State agenty or both, pursuant to application teneral indicator and such a progressive says specifications for a contraction of the second between

and the number of copies to be submitted, particularly with regard to becat, area, or regional precedures and practices either are shown below or will be assuced by, or may

Hem 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult

applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

State or Federal office for specific instructions.

be obtained from, the local Federal and/or State office.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, show-Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local

ing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices. Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone. Hem 22; Consult applicable Federal or State regulations, or approached concerning approach of the proposal before operations are started

★ U.S. GOVERNMENT PRINTING OFFICE, 1974 - 8

| | | All distances indi | t be from the outer b | | | Well No. |
|---|---|---|--|--|-----------------------------------|---|
| Operator | | | | | 7 | |
| | duction Compa | | | a Canyon Unit | | |
| Jnit Letter | Section | Township | Range | ! - | A.mailan | |
| E | 36 | 2 8N | <u> TtM</u> | R10 A | Arriba | |
| Actual Footage Lo | | | B00 | | 7.7 4 | |
| 1'70 0 | 1001 110111 1110 | | and 790 | feet from the | West | line Dedicated Acreage: |
| Ground Lavel Elev | 1 | | Pool | | | |
| <u>7327</u> | | ed Cliffs | | sa Pictured C | | 166 Acres |
| 2 If more that interest and a second a | chan one lease is and royalty). nan one lease of communitization, No If | different ownershi unitization, force- answer is "yes," t | e well, outline ea p is dedicated to pooling.etc? ype of consolidat | ch and identify the | e ownership t | hereof (both as to working |
| No allowa | if necessary.)—able will be assig oling, or otherwis | e) or until a non-st | andard unit, elim | ave been consolid inating such intere | lated (by conests, has been | nmunitization, unitization, approved by the Commis- |
| | 17001 | S 79°48'E | 5280 <i>i</i> | | tained h | certify that the information con- erein is true and complete to the ny knowledge and belief. |
| +1 | 7901 _(b) | | | | Company AMOCO | A ENGINEER PRODUCTION COMPANY Y 13, 1977 |
| North 613014 | | Sec | 36 | | shown on notes of under milistrue | certify that the well location in this plat was platted from field factual surveys made by me or y supervision, and that the same and correct to the best of myge and belief. |

1 inch = 1320'

1. 1808VEY

3950

June 15, 1977
Registered Professional Engineer

and Land Surveyor

Fred B. Kerr

Certificate No.

VALENCIA CANYON UNIT NO. 7 1700 FNL & 790 FWL, SECIION 36, T-28-N, R-4-W RIO ARRIBA COUNTY, NEW MEXICO CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Amoco Production

Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

S.O. Spen Ja

JULY 12, 1977

AREA SUPT.

Date

Name and Title

DEVELOPMENT PLAN VALENCIA CANYON UNIT NO. 7 1700 FNL & 790 FWL, SECTION 36, T-28-N, R-4-W RIO ARRIBA COUNTY, NEW MEXICO

The proposed location has big sagebrush and various grasses with occasional pinon trees. The geological name of the surface formation is the Paleozoic San Jose. A new road 500' will be required. No construction materials will be used for building the location; dirt will be leveled at the well site. Verbal approval of the drill site has been obtained from Mr. Dick C. Cooke, U. S. Forest Service; Mr. Jerry Long, USGS; and Ms. Dabney Ford, Archaeologist.

Arrangements are being made to haul water from Carrizo Wash or from the El Paso water hole on existing roads, approximately ten miles. Drilling fluid to TD will be a low solids non-dispersed mud system. Upon completion the location will be cleaned up and leveled. Drilling mud and water will be hauled away and the reserve pit backfilled. Attached is the seeding plan to be followed for this well.

There are neither airstrips nor camps in the vicinity.

The estimated tops of important geological formations bearing hydrocarbons are:

| FORMATION | DEPTH | ELEVATION | |
|-----------------|---------------|-----------|--|
| Pictured Cliffs | 4195 ' | +3130' | |
| Lewis Shale | 4350' | +2975' | |

Estimated KB elevation: 7327'

| Est. Depth | Csg. Size | Weight | Hole Size | Sacks Cement - Type |
|-----------------------|------------------|-------------|-------------------|--|
| 300 ' 4350' | 8-5/8" 4-1/2" | 24# 9.5# | 12-1/2" 7-7/8" | 175 sx - Class "B", 2% CaCl ₂ . 990 sx - Class "B", 6% Gel, 2# Med. Tuf Plug/sx. 50 sx - Class "B" Neat. |

Amoco's standard blowout prevention will be employed, see attached drawing for blowout preventer design.

Amoco plans to run the following logs: from 300' to TD, Induction-Electric; from 2470' to TD, Density-Gamma Ray. No cores or Drill Stem Tests will be taken.

In the past, drilling in this area has shown that no abnormal pressure, temperatures or hydrocarbon gas will be encountered.

We will start operation as soon as well is permitted, and a two-week operation is anticipated.

· OURVEY

SEEDING PLAN

1. TIME:

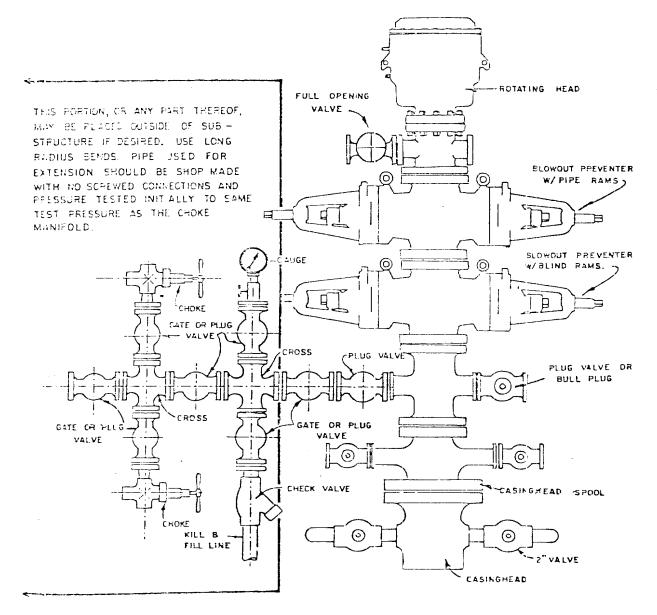
All seeding will take place between July 1, and September 15, 1978, or as required by the U. S. Forest Service.

2. EQUIPMENT:

Seeding will be done with a disc-type drill with two boxes for various seed sizes. The drill rows will be eight to ten inches apart. The seed will be planted not less than one-half inch deep or more than one inch deep. The seeder will be followed with a drag, packer, or roller to insure uniform coverage of the seed, and adequate compaction. Drilling will be done on the contour where possible, no up and down the slope. Where slopes are too steep for contour drilling, a "cyclone" hand seeder or similar broadcast seeder will be used. Seed will then be covered to the depth described above by whatever means is practical.

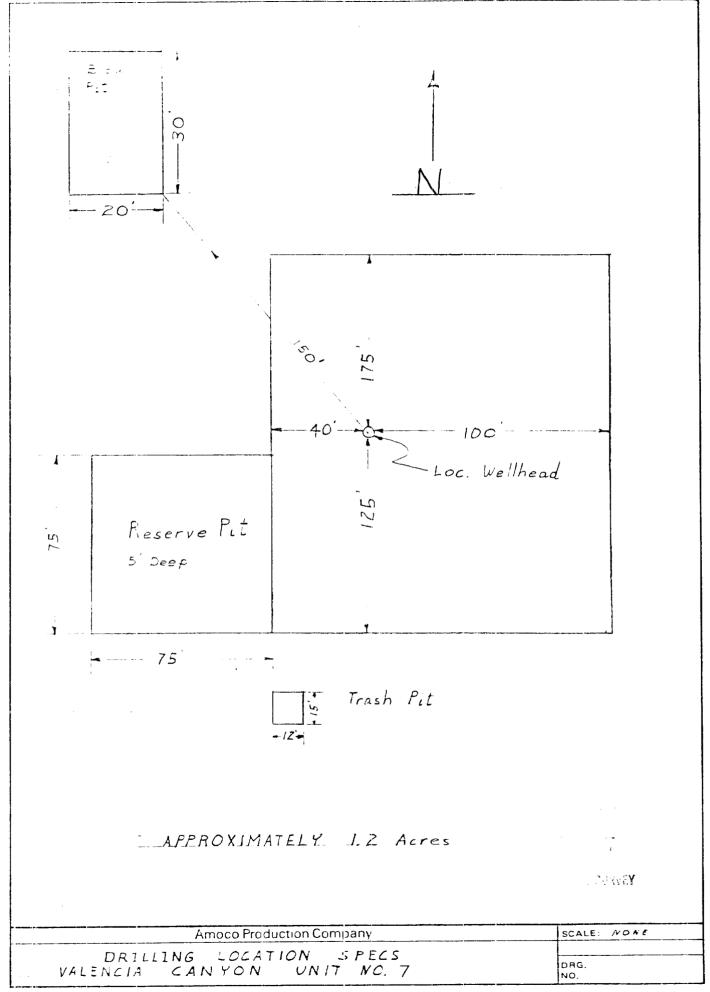
3. SPECIES TO BE PLANTED IN POUNDS PURE-LIVE-SEED PER ACRE:

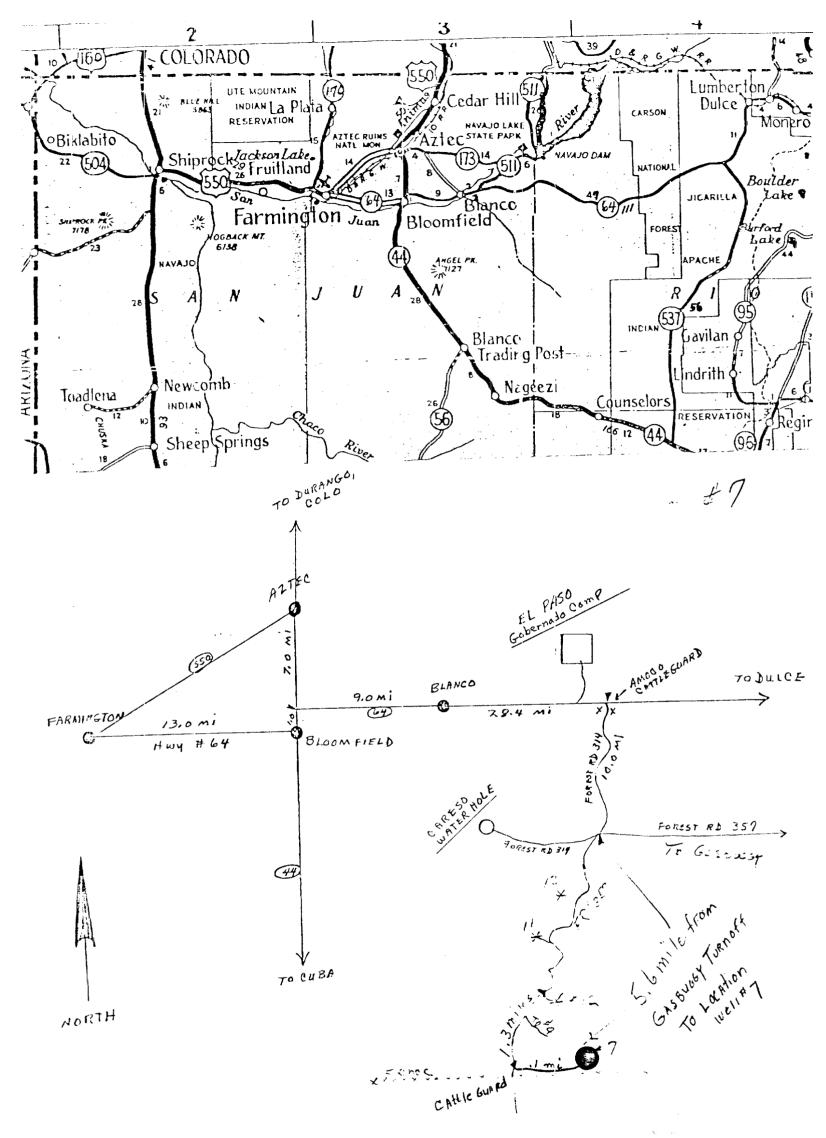
| Crested Wheatgrass | 0.71 lbs. |
|----------------------|-----------|
| Russian Wild Rye | 0.86 lbs. |
| Perennial Rye Grass | 0.57 lbs. |
| Western Wheatgrass | 1.43 lbs. |
| Smooth Brome | 1.14 lbs. |
| Intermediate Wheat | 0.91 lbs. |
| Pubescent Wheatgrass | 1.09 lbs. |
| Orchard Grass | .298 lbs. |



BLOWOUT PREVENTER HOCKUP

EXHIBIT D-4 OCTOSER 16,195





 $\mathbb{C}_{\mathbb{R}^{2n+2}}Y$

FARMINGTON AREA TRAFFIC SKETCH DENVER DIVISION VALENCIA CANYON UNIT NO. 7 RIO ARRIBA COUNTY, NEW MEXICO AMOCO WI: 100%

Fail Point, Aztec - 60.0 miles
And Point, Aztec - 60.1 miles
Gement Point, Farmington - 67.0 miles

